DOCUMENT RESUME

ED 060 182 VT 014 465

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TITLE	A Study of the Status and Effectiveness of Cooperative Office Education in New Jersey, 1968-69.
SPONS AGENCY	New Jersey State Dept. of Education, Trenton. Occupational Research and Development Branch.
REPORT NO	Monog-8
PUB DATE	70
NOTE	39p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Business Education; *Cooperative Education; Doctoral Theses; Employer Attitudes; Job Placement; Office Occupations Education; *Program Evaluation; *Project Training Methods; Student Characteristics; *Vocational Followup
IDENTIFIERS	New Jersey

ABSTRACT

This monograph summarizes a doctoral study on the effectiveness and status of New Jersey's cooperative business education programs. The general hypothesis of the study was that compared to non-cooperative office education students, cooperative students will: (1) be employed sooner, (2) be employed in more responsible positions, (3) receive higher earnings, (4) be more satisfied with their jobs, and (5) be rated more highly by their job supervisors. Among the conclusions of the study were: (1) The cooperative office education programs benefited those students who wanted to begin working immediately after high school, (2) Cooperative office education did not appear to have an effect on the beginning salary, (3) Cooperative office education did appear to have an effect on salary increases received by beginning workers, (4) A high degree of job satisfaction was indicated by both the cooperative and non-cooperative students, (5) Employers were better satisfied with those beginning office workers who were cooperative office education graduates, and (6) Cooperative office education did not appear to have a significant effect on the quantity or quality of the work performed by the beginning office workers. Numerous recommendations are also included. (Author/JS)

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MONOGRAPH

OF

A STUDY OF THE STATUS AND EFFECTIVENESS OF COOPERATIVE OFFICE EDUCATION IN NEW JERSEY, 1968-69

by

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Dissertation (Ed.D.)

Temple University

1970

PREFACE

Cooperative Vocational Education programs are defined by law as those involving arrangements between schools and employers that permit planned and supervised alternation of study with relevant work that jointly contribute to the student's employability.

The Division of Vocational Education is especially concerned that the related classroom experience is relevant to actual on-the-job experiences. The student who sees no relationship between what he learns in the classroom and what he is required to do on the job will lack motivation and will tend to either view the classroom experience with indifference or see his job only as a means to earn spending money. The cooperative vocational education teachers of New Jersey are dedicated to seeing that this does not happen.

Cooperative office education students are not the only ones to profit from meaningful experiences in the classroom and on the job. New Jersey businessmen find an excellent source of trained and eager employees who plan to make office work their career and are ready and willing to exert extra effort to conform to the highest expectations of their employers.

Through the combined efforts of teachers, administrators, and businessmen, cooperative office education programs in New Jersey continue to increase, to improve, and to stand out as a model for the nation.

This study is the first in-depth state-wide research on cooperative business education in the nation since the passage of the Vocational Education Act of 1963. It provides a model for much needed study and evaluation of other cooperative vocational education programs. The Division of Vocational Education is pleased to have had the opportunity to participate in this important project.

Robert M. Worthington, Ph.D.
Assistant Commissioner of Education
And
State Director of Vocational Education

INTRODUCTION

Many educators emphasize the importance of planned work experience in the education of the large number of youth who plan to enter adult employment upon leaving high school.

Not all educators share the conviction that a cooperative program is needed. They point out that many students go through a cooperative education program and benefit little by it, while others become good workers without participating in a cooperative education experience. Those graduates secure office positions after completion of the regular pattern of business studies.

The Vocational Education Act of 1963 and the Vocational Amendments of 1968 have given great impetus to cooperative education and to the cooperative office movement. Interest in cooperative education as an integral part of the total program of vocational education has increased steadily.

A review of programs in existence in the State of New Jersey just prior to the passage of the Vocational Education Act of 1963 revealed that the State had twenty-five cooperative office education programs. The State Department of Education, Division of Vocational Education, has placed a great deal of emphasis on the expansion of cooperative office education opportunities in New Jersey. The number of cooperative office education programs in New Jersey increased from 25 programs in 1964 to 104 programs in 1967.

Of the 17,802 June, 1969, high school graduates who were enrolled in office occupations classes in New Jersey, approximately 10 percent or 1,799 students were enrolled in cooperative programs. State and

federal aid for New Jersey programs of cooperative office occupations increased from $6,396 in the 1964-65 school year to $395,467 in the 1968-69 school year.[1]

Although there has been such a great increase in the number of participants and the amount of support for cooperative office education programs, a survey of both empirical literature and research revealed the need for further appraisal of such programs. Additional information regarding secondary school programs in cooperative office education is needed by business educators in order to determine the effectiveness of such programs as a learning device in the preparation of students for office jobs.

Purpose of the Study

Although there is a difference of opinion regarding the value of cooperative office education, it is believed by many to be an effective learning device in the preparation of students for office jobs. The purpose of this study was (1) to determine the present status of cooperative office education programs in New Jersey and (2) to evaluate the effectiveness of cooperative office education.

In order to determine present status, those people most directly concerned with cooperative office education in New Jersey were questioned regarding program enrollment, job experiences, time spent on the job, and reactions to the program. Effectiveness of cooperative office education was determined by studying differences between beginning office workers who participated in cooperative

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[1]Figures supplied by Division of Vocational Education, New Jersey State Department of Education.

office education while in high school and those who did not participate with respect to employment, job satisfaction, and ratings of job competency.

With the additional knowledge of cooperative office education, it is possible that cooperative office education can be amended and advanced to greater effectiveness.

Statement of the Problem

The problem studied in this investigation was a determination of the characteristics of the cooperative office education program in New Jersey and the responses to goals of this program by beginning office workers who were previously enrolled in cooperative office education.

General Hypothesis

Cooperative office education students will be superior to non-cooperative office education students with respect to certain variables. Specifically, they will be employed sooner, will be employed in more responsible positions, will receive higher earnings, will be more satisfied with their jobs, and will be rated more highly by their job supervisors.

Delimitations of the Problem

The study was delimited in the following manner.

1. Schools used in the study were limited to public secondary schools in New Jersey.

2. Only those schools having cooperative office education programs during the 1968-69 school year were considered for sampling.

3. Accuracy of the information pertaining to future programs of cooperative office education in New Jersey was dependent upon the replies of those persons serving as principals of New Jersey high schools during the 1968-69 school year. No attempt was made to contact superintendents of schools or boards of education regarding such programs.

4. No attempt was made to study courses taken by the students, academic achievement, or socioeconomic status.

Definition of Terms

Certain terms used throughout the study may have more than one meaning or have special meaning. As used in this study,

Cooperative office education is defined as a program of vocational education developed jointly by the school and business in which job skills and adjustment are secured through an organized sequence of supervised job experiences in paid part-time employment and through classroom experience in related instruction.

Cooperative office education student is a high school senior who participated in the cooperative office education program in his school during the 1968-69 school year.

Cooperative office education graduate is a June, 1969, high school graduate who participated in the cooperative office education program in his school.

Non-cooperative office education graduate is a June, 1969, high school graduate who was enrolled in business classes and who planned to secure an office job after his graduation from high school.

Coordinator is the person designated by the high school as being in charge of the cooperative office education program.

Cooperating business firm is the company which employed the students involved in the cooperative office education program during the 1968-69 school year.

RELATED RESEARCH

Research was reviewed and classified into three areas: (1) state-wide studies, (2) follow-up studies, and (3) comparative studies.

Few studies of cooperative office education on a state-wide basis have been reported and little was found regarding the evaluation of cooperative office education as a learning device in the preparation of students for office jobs. Therefore, some studies of cooperative education in other subject areas were included in the review of related research.

The number of schools participating in the state-wide studies has been relatively small. No state-wide comparative studies of cooperative office education have been reported in the literature. Most of the state-wide studies on cooperative office education have attempted to determine the practices and procedures of the programs in existence in the states studied. Although there is some variation in the findings, there is a great deal of agreement regarding the selection of students for participation in the program, the securing of business positions for the students, the duties of the coordinators, and in the determination of the advantages and disadvantages of cooperative education. In addition, most of the studies reported that the people involved with cooperative office education expressed a favorable attitude toward it.

The state-wide follow-up study conducted by Michigan State University was most inclusive and comprehensive in determining the status of cooperative education graduates approximately ten months after graduation. It was concluded that cooperative vocational education

contributed to the students by assisting in locating employment soon after graduation. Employers benefitted because many trainees remained with their cooperative training employer full-time after graduation.

In those comparative studies of cooperative education which have been reported, primarily in the distributive education areas, few significant differences were found between those workers who participated in cooperative education programs while in high school and those who did not participate. The studies have been limited and conflicting outcomes have been reported particularly in the area of job adjustment and satisfaction.

Findings of the studies reported in the review of the research have been largely supported by a number of other studies done on a local level that have employed essentially the same approach. However, because of the growth of cooperative office education and because of the lack of comparative studies in this area, there is a need for additional data regarding both the status and the effects of cooperative office education on beginning workers. An obvious research gap exists in the area of cooperative office education. There is a continuing need for the evaluation of such programs and the role they play as part of the preparation of students for the world of work.

PROCEDURES USED IN THE STUDY

The purpose of this study was to (1) determine the present status of cooperative office education programs in the State of New Jersey and (2) evaluate the effectiveness of cooperative office education. The New Jersey State Department of Education, Division of Vocational Education, was contacted to obtain permission to conduct a study of the cooperative office education programs in New Jersey. Permission was granted by Dr. Robert M. Worthington, Assistant Commissioner of Education, State Director of Vocational Education.

Selection of the Sources of Data-Phase I

In order to determine the present status of cooperative office education in the secondary schools in New Jersey, it was decided to include those people most directly involved with such programs in the 1968-69 school year. All high school principals, all business education department chairmen, all cooperative office education coordinators, and as many as possible of all the cooperative office education students and cooperating business firms were contacted.

Selection of the Sources of Data--Phase II

Phase II of the study was to determine whether or not significant differences existed between two groups of beginning office workers. One group, the COE group, participated in cooperative office education programs during the 1968-69 school year. The other group, the non-COE group, did not participate in cooperative office education. To accomplish the purpose as stated, it was decided to follow to their full-time jobs a group of June, 1969, cooperative office education graduates and a group of June, 1969, non-cooperative office education graduates. The non-cooperative office education group was composed of graduates who had been enrolled in business classes and who had planned to secure office positions after graduation; however, they had not participated in the cooperative office education programs in their schools. Job supervisors were contacted to rate the beginning office workers.

Development of the Instruments for the Collection and Recording of the Data

In order to collect the data needed concerning cooperative office education programs in the public secondary schools of New Jersey during the 1968-69 school year, it was necessary to employ a reply card, five questionnaires, and two rating scales.

Form A--Principal's Questionnaire. Form A was designed to be sent to every principal of every public high school in New Jersey. The data to be collected were comprised of factual information, opinions and viewpoints regarding cooperative office education. Since not all schools had a cooperative office education program, not all questions were answered by all of the principals.

Form B--List of Participating Business Firms. This form was sent to each coordinator to determine the names and addresses of all participating business firms.

Form C--Coordinator's Questionnaire. Form C was constructed to obtain from the coordinators detailed information about the cooperative office education program in each of their high schools. The initial step was to compile a list of questions regarding all phases of cooperative office education for which the coordinators were responsible. The questions were then categorized into six areas of concern. The six sections included are: Background Information, Participating Pupils, Cooperating Business Firms, COE Coordinator, State Department of Education, and Additional Information. Certain types of background data were requested in order to aid in the interpretation of the findings. Information included was correlated with information requested on the forms to the other participating groups in Phase I.

Form D--Cooperating Business Firms. Form D is a checklist sent to the cooperating companies to determine their responses to participation in cooperative office education programs in New Jersey.

Form E--Student Questionnaire. This was used to obtain student information pertaining to their job experiences as cooperative office education participants.

Form F--List of Non-COE Business Graduates, 1968-69. This form was sent to all business education department chairmen to obtain the names and addresses of their non-COE business graduates.

Form G--Job Information Questionnaire. Form G was sent to the two groups of graduates followed to their full-time jobs approximately four months after graduation from high school. Information requested was presented in two parts, one dealing with background information and the other dealing specifically with the graduate's present job.

Form H--Employee Rating Form. This form is explained further under the section Job Performance Rating Instrument.

Development of the Measuring Instruments

To obtain the information needed in Phase II of this study regarding the evaluation of cooperative office education, it was essential that some sort of measuring instrument be devised to determine satisfaction and that another be used to measure job performance. A lengthy investigation was made of possible sources, and various devices were considered.

Job Satisfaction Scale

After checking the literature for statements which professed to indicate degrees of job satisfaction, six statements were chosen and modified for inclusion in a job satisfaction scale for use in Phase II of this study. Entitled "Your View of Your Job," the items were presented in the paired comparisons format. Two item sequences, called Forms I and II, were prepared. The job satisfaction scale became the second page of Form G.

Job Performance Rating Instrument

One of the major aspects of Phase II of this study was to ascertain whether or not significant differences existed between the job performance ratings of two groups of beginning office workers. This job performance rating scale is similar to the scale once used by the United States Civil Service Commission.

Entitled "Employee Rating Form," Form H was sent to the supervisors of the two groups of beginning office workers. They were asked to rate their employees in six areas: Quantity of Acceptable Work, Quality of Acceptable Work, Initiative, Work Attitude, Attitude Toward Others, and Over-All Value. Directions were included which asked the supervisor to compare the employee with other workers within the same grade and kind of work. The employee to be rated was designated on each form.

Coding and Tabulation of the Data

Because of the volume of information requested by the data collection instruments, the data provided were sorted and coded for

transfer to IBM Data Processing Cards. In the instances of open questions, it was necessary to determine general categories for coding after the replies were received. For Phase I of this study, an IBM 1130 was programmed to obtain the tallies presented in the tables. An electronic calculator was used to determine the percentages. For Phase II, an IBM 360-44 was programmed to produce the tallies and group means for each of the characteristics in the employee rating scale. The IBM 1130 was used to obtain the tallies for the job information form and for the job satisfaction scale.

Treatment and Analysis of the Data

The first treatment of the data was by separate categories. Individual tallies and percentages were determined for all items of the forms used in both Phase I and Phase II of the study. As reported previously, a judgment was made to treat each group separately. This eliminated the need in Phase I to use only those schools from which a reply had been received from all four groups contacted. The same judgment applied to the data collected in Phase II.

Statistical analysis. In order to test the significance of the difference between the mean scores received by the COE group and the non-COE group on the job satisfaction scale and the employee rating form in Phase II of the study, the standard deviation, standard error of the mean, the standard error of the difference between the means, and the Fisher *t* test were computed. In addition, the chi square test of significance was applied to data collected from Form G, Job Information Questionnaire, in Phase II of the study. These data

were in the form of proportions. The chi square test enabled a determination of whether the differences between the theoretical and the observed proportions in selected categories were due to chance variations in sampling. An electronic calculator was used to assist in the statistical analysis of the data.

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Status of Cooperative Office Education in New Jersey

The major findings and conclusions regarding the status of the cooperative office education program in New Jersey are summarized below.

1. The use of cooperative office education has increased in New Jersey. Of the 277 public high schools in New Jersey, 121 or 43.7 percent indicated that they offered a cooperative office education program during the 1968-69 school year. There was an increase of 84 programs or more than 300 percent over a ten-year period. More than half of those programs were started within the past three years, and more are planned for the future.

2. The program is offered for a full school year in almost three-fourths of the schools. In most of the programs, students spend one-half day in school and one-half day on the job.

3. Most of the coordinators appeared well-qualified for their positions as indicated by their education background and their own job experience. Only 5 percent of the coordinators did not have an undergraduate degree in business education. Forty percent of them stated that they had a master's degree in business education, and an additional 15 percent said they were working on a master's degree at the present time. Approximately 90 percent of the coordinators reported that they had some office work experience.

4. The principals were satisfied with the qualifications and work of the coordinators. The work of the coordinators was appraised in four areas and was rated "above average" in each of the areas by

70 percent or more of the principals--classroom instruction, organization of the program, public relations, and job supervision of students.

5. A wide variety of methods were used to assist in the selection of students for the program. The students were influenced by both the school and home. Approximately 80 percent of the coordinators indicated that they worked with the guidance department in their schools in the selection of students for the cooperative office education program, and nearly the same number said they used the personal school records to assist in student selection.

6. The businessmen were strong supporters of the cooperative office education program. In addition to supervising the students while on the job, the businessmen assisted in the development of the program. Sixty-three percent of the coordinators reported the use of an advisory committee to assist in the development of the program.

7. Most of the students worked between 15 and 20 hours a week and were paid the prevailing wages for the jobs held. More than one-half of the students were paid between $1.55 and $1.84 an hour. The money received per hour ranged from $1.25 to $2.54.

8. Employers, coordinators, and students indicated that not all of the students were provided a varied, comprehensive training program.

9. An overwhelming majority of the businessmen were pleased with the performance of the cooperative office education students. The students involved in this study compared favorably with students of other years.

10. Very few male students participated in cooperative office education. Ninety percent of the students in the program are girls.

11. The main advantages of the program were that the program bridged the gap between school and work, and it provided the experience the student needed. For the businessmen, it provided them with the needed part-time employees.

12. The main disadvantage of the program was that students could not participate in the complete school program. Only 20 percent of the students were able to participate in school activities. Scheduling difficulties occurred in school and on the job because of the half-day in school and half-day on the job format used by most of the schools.

13. The students believed that the cooperative office education program was beneficial. Approximately 90 percent of the students indicated that the cooperative office education program was beneficial and was satisfying their needs and that the program had inspired them to do better work. However, less than half of the students said they had been asked to contribute to the classroom instruction.

14. The most important suggestion for improving the cooperative office education program as indicated by the businessmen and the coordinators was that more emphasis should be placed on fundamentals. The students thought that the best way to improve the program was to inform and encourage students with the needed interest, aptitude, and ability for office positions to consider the cooperative office education program. The other suggestions ranked second or third in importance for improving the program were that more emphasis should be placed on correct business techniques and more attention should be given to the development of a good business personality.

15. The Division of Vocational Education has encouraged and supported the organization and continuation of cooperative office education programs in New Jersey. Slightly more than 60 percent of the coordinators reported that funding by the Division of Vocational Education had helped establish the cooperative office education program in their schools. However, more information regarding cooperative office education is desired by the coordinators.

Effectiveness of Cooperative Office Education

The major findings and conclusions pertaining to the effects of cooperative office education on beginning office workers are summarized below.

Those conclusions based on the findings of the job information questionnaire are as follows.

1. Many of the cooperative office education graduates were putting their training to work by being employed in office occupations. Approximately 80 percent of those contacted were employed in an office on a full-time basis.

2. Of those cooperative office education graduates and non-cooperative office education graduates contacted who were not working full-time, more than one-half were enrolled in programs of higher education.

3. The cooperative office education program was beneficial to those students who wanted to begin working immediately after high school graduation. A significant difference was present in favor of the cooperative office education graduates in the speed of securing full-time office positions after graduation.

4. A significant difference does exist in the methods used to obtain employment between the beginning office workers who have or have not completed a high school program of cooperative office education. The cooperative office education group received more help from school in obtaining jobs. Less than 30 percent of the non-cooperative office education graduates obtained their jobs through the school.

5. The cooperating business firms were benefiting from their participation in the cooperative office education program. Four months after graduation, more than one-half of the cooperative office education graduates were still working with the same company they worked for while in high school.

6. A significant difference does exist in job titles between cooperative office education employees and those who have not participated in a cooperative office education program. Secretarial work was performed by 27.4 percent of the cooperative office education graduates, and approximately 20 percent of the non-COE graduates were performing secretarial duties.

7. Cooperative office education did not appear to have an effect on the salary earned on the first job immediately after high school graduation. A significant difference did not exist in the beginning weekly gross wages received by the beginning office workers who did or did not participate in cooperative office education while in high school.

8. Cooperative office education appeared to have an effect on the salary increases received by the beginning workers. At least one increase in pay was reported by 59 percent of the cooperative office

education graduates and by nearly 38 percent of the non-cooperative office education graduates. A significant difference existed in favor of the cooperative office education group in the weekly gross wages earned five months after graduation from high school.

9. Cooperative office education did not appear to have an effect on job stability or on the reasons why an employee changed jobs.

Conclusions based on the finding resulting from the job satisfaction instrument are as follows.

1. A high degree of job satisfaction was indicated by both the cooperative office education graduates and the non-cooperative office education graduates.

2. A significant difference in job satisfaction does not exist between the beginning office workers who participated in the cooperative office education program while they were in high school and those who did not participate.

The findings of the employee rating form resulted in the following conclusions.

1. The beginning office workers in both the cooperative office education group and the non-cooperative office education group have a good attitude toward their work. This confirms the results of the job satisfaction instrument which indicated a high degree of job satisfaction was present among both groups of beginning workers.

2. Initiative was the area in which the largest number of beginning office workers in both groups received a low rating. Both the beginning workers who participated in cooperative office education and those who did not participate need to show more initiative in their job performance as indicated by their job supervisors.

3. The employers were better satisfied with the beginning office workers who were cooperative office education graduates. The job supervisors gave higher ratings to the cooperative office education graduates in every area of job performance. Areas measured were: quantity of acceptable work, quality of acceptable work, initiative, work attitude, attitude toward others, and over-all value.

4. Cooperative office education did not appear to have a significant effect at the .05 level on the quantity or quality of the work performed by the beginning office workers.

5. No significant difference existed at the .05 level in the initiative of the beginning office workers who were cooperative office education graduates and the initiative of those beginning office workers who did not participate in cooperative office education.

6. A significant difference does exist at the .05 level in favor of the cooperative office education group in the ratings received for attitude toward work and at the .05 and .01 levels in attitude toward others.

7. A significant difference does exist at the .05 and .01 levels in the overall rating of job performance received by the beginning office workers who were cooperative office education graduates as contrasted with those beginning workers who did not participate in cooperative office education.

8. The mean score for the total employee rating form was 6.730 for the cooperative office education graduates and 6.295 for the non-cooperative office education graduates.

RECOMMENDATIONS

The recommendations are presented in three sections. The first section is comprised of those recommendations resulting from the first phase of the study pertaining to cooperative office education programs in the public secondary schools of New Jersey in 1968-69. The second section includes those recommendations resulting from the data collected regarding beginning office workers. The third section provides recommendations for further research and implications for cooperative office education programs.

The recommendations resulting from the information reported on the various data-collection forms used to determine the status of cooperative office education in the public high schools of New Jersey are as follows.

1. Some type of continuous reporting system is needed so that the State Department of Education will have up-to-date information concerning the number, location, and types of cooperative office education programs in operation.

2. On-the-job experiences should be included when teaching the related classes in order to make the on-the-job experience more educationally valuable. Since less than one-half of the cooperative office education students indicated that they have been asked to contribute to the classroom instruction, more work needs to be done in the area of teacher-pupil planning.

3. On-the-job training should contribute directly to the development of occupational competency. The coordinator should be aware of what work is being performed by the student. If a varied

program is not offered within a job station, the possibility of a student exchange of jobs after a predetermined time period should be explored.

4. Since only 20 percent of the students were able to participate in the program of school activities, some effort should be made to include a program of extracurricular activity for the students in the cooperative office education program. The possibility of a morning work schedule should be considered.

5. The primary suggestion for the improvement of the cooperative office education program reported by the students, and supported by the coordinators, indicated the need for an expanded and modified program of information regarding the values and opportunities available to the students, the faculty, and the administration.

6. A primary suggestion for the improvement of the program indicated by the coordinators and the businessmen was to place more emphasis on fundamentals. In order to determine how best this can be accomplished, there should be discussion between the school, the on-the-job supervisor, and the students.

7. Efforts should be made to determine how the cooperative office education program can provide for the full range of student abilities. Work stations should be made available for all students who need, want, and can profit from participation in the program.

8. More male students should be encouraged to participate in the program.

9. Although 68 percent of the coordinators reported that their school had an advisory committee, it is important that advisory committees be consulted regarding all aspects of the operation of the cooperative office education program.

10. Cooperation from the high school guidance department is needed to provide information to the coordinators regarding the students. In addition, they should be able to provide information to students with the needed interest, aptitude, and ability regarding the value of cooperative office education.

11. Business firms should be informed of the program and should be encouraged to participate on a regular basis.

12. Consultants from the Division of Vocational Education should be available to assist with the continuation, evaluation, and expansion of the program as well as with the preliminary organization of the cooperative office education program in the schools.

13. Since so many of the people working most closely with cooperative office education believe it contributes to the total school program, those schools that do not have such a program should study the advisability of offering a cooperative office education program for their students.

The recommendations resulting from the information pertaining to beginning office workers as obtained through the use of the job information questionnaire, the job satisfaction instrument, and the employee rating form are as follows.

1. Some type of follow-up system should be initiated by the schools so that graduates of the school can be located.

2. Since less than thirty percent of the non-cooperative office education graduates indicated that the school had assisted them in obtaining a full-time job, efforts should be made to determine how the school's placement function can be strengthened.

3. Efforts should be made to encourage initiative on the part of students to better prepare them for office positions.

4. A continuing program of follow-up and evaluation is needed to accurately determine the results of participation in cooperative office education.

5. The cooperative office education program should be organized in such a way as to obtain the behavioral outcomes desired in beginning office workers.

Recommendations for Further Research and Implications for Cooperative Office Education Programs

1. Efforts should be made to clearly differentiate between work-experience education and cooperative education. There appears to be some confusion regarding these terms, even with the people most closely involved with cooperative office education.

2. Since interest in office work was the factor which influenced students most to apply for the cooperative office education program, a study of self-concept may be helpful in determining what makes students interested in office work. Why do they choose it, or what forces them to choose it?

3. Teacher education institutions should offer comprehensive courses for coordinators. Course content should not be limited to the methods of organizing a cooperative program.

4. A greater effort should be made for a continuous evaluation of the program by the schools. Such evaluation should be concerned with the students while they are in school and after graduation.

5. A study should be made to determine why students who planned to obtain an office position after graduation did not do so. Why did

they enroll in programs of higher education, or why did they select some other type of work?

6. An analysis should be made of the factors related to job satisfaction of beginning office workers.

7. A study should be made to determine job-related differences which do or do not exist between those beginning workers who participated in cooperative office education and those who did not participate. Graduates of those schools that do not offer a cooperative office education program should be included.

8. A study should be made to determine whether or not more secretarial than clerical students are encouraged to participate in the cooperative office education program.

9. Qualifications for the position of coordinator should be established. A feasibility study might be conducted to determine the desirability of establishing certification standards.

10. A conference, or series of conferences, should be sponsored by the State Department of Education, Division of Vocational Education, for curriculum policy formulation. Randomly selected cooperative office education students and non-cooperative office education students should attend, as should coordinators, teachers, business personnel, and representatives from the Division of Vocational Education.

Table I

Percentage of Replies to Each Form

Form	Number Distributed	Number of Replies	Percentage of Replies	Number Used	Percentage
X	277	216	74.4	216	100.0
A	277	270	97.5	251	92.9
B	121	110	90.9	104	94.5
C	121	109	90.1	103	95.3
D	1,112	735	66.1	574	77.9
E	1,650	1,562	94.1	1,518	97.9
F	98	88	89.8	76	86.3
G-COE	400	294	73.5	237	80.6
Non-COE	900	476	52.9	248	52.1
H-COE	237	191	80.6	186	97.4
Non-COE	248	210	84.7	200	95.2
Totals	5,439	4,261		3,713	

NOTE: Letters used in Table I indicate the following:

X - Department Chairman Reply Card
A - Principal's Questionnaire
B - List of Participating Business Firms, 1968-69
C - Coordinator's Questionnaire
D - Cooperating Business Firms' Questionnaire
E - Student Questionnaire
F - List of Non-COE Business Graduates, 1968-69
G - Job Information Questionnaire
H - Employee Rating Form

Table II

Job Satisfaction Choices of 1969 Graduates
(Form G-2, COE N=237 (15), Non-COE N=248 (15)

Statement	COE	Non-COE
E. My job broadens my outlook.	979 27.5%	967 25.9%
A. My job is more absorbing than a hobby.	799 22.5%	800 21.5%
B. My job keeps me from getting bored.	788 22.2%	800 21.5%
C. My job is a necessary evil.	380 10.7%	445 12.0%
F. My job gives me the feeling a day will never end.	364 10.2%	471 12.7%
D. My job is labor in vain.	245 6.9%	237 6.4%
Totals	3,555 100.0%	3,720 100.0%

Table III

Values of the Six Job Satisfaction Statements

Statement	Value
A. My job is more absorbing than a hobby.	2.085
B. My job keeps me from getting bored.	1.983
C. My job is a necessary evil.	.843
D. My job is labor in vain.	.000
E. My job broadens my outlook.	3.391
F. My job gives me the feeling a day will never end.	.8585

Table IV

Employee Rating of the Cooperative Office Education 1969 Graduates
as Reported by the Immediate Supervisor
(Form H, N=186)

Trait	Lower Group			Middle Group			Higher Group			Totals
	Low (1)	Typical (2)	High (3)	Low (4)	Typical (5)	High (6)	Low (7)	Typical (8)	High (9)	
Quantity of Acceptable Work	1	5 (11 - 5.9%)	5	12	43 (82 - 44.1%)	27	10	59 (93 - 50.0%)	24	186 100.0%
Quality of Acceptable Work	3	4 (15 - 8.1%)	8	8	38 (72 - 38.7%)	26	18	56 (99 - 53.2%)	25	186 100.0%
Initiative	5	6 (21 - 11.3%)	10	7	34 (64 - 34.4%)	23	14	44 (101 - 54.3%)	43	186 100.0%
Work Attitude	1	6 (12 - 6.5%)	5	9	30 (55 - 29.6%)	16	19	56 (119 - 64.0%)	44	186 100.0%
Attitude Toward Others	1	1 (9 - 4.8%)	7	4	34 (61 - 32.8%)	23	12	57 (105 - 52.0%)	47	186 100.0%
Over-all Value	0	6 (14 - 7.5%)	8	11	27 (58 - 31.2%)	20	18	53 (114 - 61.3%)	43	186 100.0%

Table V

Employee Rating of the Non-Cooperative Office Education 1969 Graduates
as Reported by the Immediate Supervisors
(Form H, N=200)

Trait	Lower Group Low	Lower Group Typical	Lower Group High	Middle Group Low	Middle Group Typical	Middle Group High	Higher Group Low	Higher Group Typical	Higher Group High	Totals
Quantity of Acceptable Work	3	10	10 (23 - 11.5%)	7	48	37 (92 - 46.8%)	16	42	27 (85 - 42.5%)	200 100.0%
Quality of Acceptable Work	2	9	9 (20 - 10.0%)	10	53	33 (96 - 48.0%)	12	45	27 (84 - 42.0%)	200 100.0%
Initiative	9	9	7 (25 - 12.5%)	15	42	27 (84 - 42.0%)	16	39	36 (91 - 45.5%)	200 100.0%
Work Attitude	8	4	10 (22 - 11.0%)	4	46	23 (73 - 36.5%)	14	44	47 (105 - 52.5%)	200 100.0%
Attitude Toward Others	1	1	7 (9 - 4.8%)	4	55	25 (84 - 42.0%)	15	40	43 (98 - 49.0%)	200 100.0%
Over-all Value	5	8	10 (23 - 11.5%)	6	56	26 (88 - 44.0%)	14	29	46 (89 - 44.5%)	200 100.0%

Table VI

Mean Scores of the Cooperative Office Education Graduates as Rated by Their Employers (Form H, N=186)

Trait	Mean
Attitude Toward Others	7.048
Work Attitude	6.919
Over-all Value	6.838
Initiative	6.559
Quality of Acceptable Work	6.516
Quantity of Acceptable Work	6.500

Table VII

Mean Scores of the Non-Cooperative Office Education Graduates as Rated by their Employers (Form H, N=200)

Trait	Mean
Work Attitude	6.515
Attitude Toward Others	6.485
Over-all Value	6.275
Quality of Acceptable Work	6.185
Quantity of Acceptable Work	6.170
Initiative	6.140

Table VIII

Statistical Comparison of Job Performance Ratings

Characteristics	Mean		Standard Deviation		Standard Error of Mean		Standard Error of Difference	Fischer t	Significant at .05 Level[a]
	COE	Non-COE	COE	Non-COE	COE	Non-COE			
1	6.500	6.170	1.879	2.028	.138	.144	.200	1.65	No
2	6.516	6.185	1.938	1.995	.143	.142	.200	1.66	No
3	6.559	6.140	2.190	2.265	.161	.161	.229	1.83	No
4	6.919	6.515	1.959	1.766	.144	.125	.190	2.13	Yes
5	7.048	6.485	1.815	2.030	.133	.144	.197	2.86	Yes
6	6.838	6.275	1.974	2.182	.145	.155	.213	2.64	Yes

[a] Degrees of Freedom - 384

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